

COPY NO. 10

Seasons: Guatemala

March 1954

DOCUMENT NO. \_\_\_\_\_  
NO CHANGE IN CLASS. \_\_\_\_\_  
BY DECLASSIFIED \_\_\_\_\_  
CLASS. CHANGE TO: TO: S. C. \_\_\_\_\_  
AUTH: HR 70-2 \_\_\_\_\_  
DATE: 4 DEC 1980 REVIEWER: 008610

### Seasons: Guatemala

Seasons in Guatemala are differentiated on the basis of rainfall, not on temperature. The monthly range in temperature is slight, e.g. during January, the coldest month, Guatemala City has an average temperature of approximately 61 degrees while in May, the hottest month, the average temperature is 68 degrees. On the other hand, there are significant differences between the seasons from the standpoint of rainfall.

There are two seasons in Guatemala -- a rainy and a dry. The rainy season, though it occurs during months of northern hemisphere summer is locally called invierno (literally, "winter"), whereas the dry season of the true winter months is called verano ("summer").

The rainy season is one of frequent cloudiness, low overcast and fog, as well as almost daily afternoon rain. In the Pacific coast area and the highlands, the rainy season generally extends from May through October. On the Caribbean coast, it rains heavily all year except for a relatively drier period during February, March, and the first half of April.

The port of San José on the Pacific coast receives an average annual rainfall of approximately 60 inches, most of which falls during the months of May through October. There is an average of fifty rainy days, or, more accurately, fifty rainy afternoons, during this season. The rains generally taper off rather sharply during November (with an average of only five days of rain), and December, January, February, and March are extremely dry.

At Santa Ysabel, a few miles inland from San José at an elevation of about 2,000 feet, precipitation is considerably more abundant. The total annual rainfall averages approximately 96 inches. The rainfall regime, or seasonal distribution, is similar to that of San José with a pronounced dry season beginning in November and ending in the latter part of April. June is the wettest month of the year, but there is a secondary maximum rainfall period in September and October.

Guatemala City, located inland and at an elevation of 4,855 feet has dry and wet seasons of almost equal length; May is the first month of a rainy season that terminates during October. As at both San José and Santa Ysabel, June and September are the wettest months. The total rainfall at Guatemala City averages about 52 inches per year; 95 percent of this precipitation falls during the May-to-October rainy season.

San Antonio, in the western highlands of Guatemala northwest of Coatepeque and near the Mexican border, has an annual rainfall of about 175 inches. The rainy season, as in other parts of the country, begins

in May and ends in October but there are two significant differences in the San Antonio area -- there is much more precipitation both in the rainy season and in the drier season. June and September are the wettest months, each receiving about 30 inches of rain per year. However, even the driest month of the year regularly receives an inch or two of rain and the total rainfall for the "dry" season averages 27 inches.

Between the highlands paralleling the Pacific coast and the Cobán mountains and hills that extend westward from the Gulf of Honduras, there is a relatively dry belt. Salamá might be considered as typical of this area, although local terrain differences frequently cause different climates within short distances. The seasons in Salamá are very similar to those in the previously mentioned locations, that is, a dry period from November through April, followed by a six-month rainy season. However, the total annual rainfall averages only slightly more than 30 inches. June is the wettest month; December, January, and February are very dry. Although precise data are not currently available concerning the precipitation in the area to the south of Salamá, it has been reliably reported that the territory near El Progreso and Jalapa are even drier than is Salamá. In fact, the triangular area bounded by El Progreso, Jalapa, and Zacapa is the driest part of Guatemala.

The area north of Cobán, on the other hand, is included among the wettest parts of the country. The town of Chimax, for example, receives approximately 100 inches of rain per year. The rainy season begins in May and lasts through November, with maximum rainfalls received in June and October. The so-called dry season in this area is, in reality, a less wet season since even the driest month, March, receives more than four inches of rain.

A comparison of Chimax with Gubilquitz (a few miles to the north) offers a good example of how drastically the climate may change in Guatemala within relatively short distances. The seasonality is similar with June, September, and October being the wettest months and March the driest. However, the total annual rainfall at Gubilquitz is approximately 157 inches, or about 60 inches more than is received at Chimax.

Puerto Barrios on the Gulf of Honduras receives about 125 inches of rain each year and has a seasonal rainfall pattern similar to those of the stations already mentioned except for the fact that the dry season is very short and is not really dry. Approximately ten percent of the yearly rainfall total is received during the "dry" season -- February, March, and April. Precipitation during the other months is frequent and heavy, particularly in July and October.

Generally throughout Guatemala long-lasting, steady, and widespread rains (called "temporales") occur frequently in the second half of the rainy season, during which the sun sometimes remains hidden for several days or even a week. At such times a light drizzling rain (or drizzling fog) soaks the soil even more intensively than heavy downpours, with the result that the roads intended for automobile traffic sometimes become impassable for weeks unless they have a solid rock foundation or are built in areas of good drainage. In the lowlands, vast areas are frequently and regularly flooded.

Thunderstorms are quite frequent during the rainy season but are rare during the dry period. They also are more frequent in some months of the rainy season than in others; their number decreases considerably as soon as the temporales begin in the second half of the rainy season.